

## **REMARKS**

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance.

### **I. STATUS OF CLAIMS AND FORMAL MATTERS**

Claims 18-22 are pending. Claims 1-17 are cancelled and claims 18-22 are added, without prejudice.

No new matter is added by these amendments.

It is submitted that these claims are patentably distinct from the prior art cited by the Examiner, and that these claims are in full compliance with the requirements of 35 U.S.C. §112. The amendments and remarks herein are not made for the purpose of patentability within the meaning of 35 U.S.C. §§ 101, 102, 103 or 112; but rather the amendments and remarks are made simply for clarification and to round out the scope of protection to which Applicant is entitled. Support for new claims 18-22 is found throughout the specification and from the cancelled claims.

### **II. 35 U.S.C. §102 REJECTIONS**

Claim 12 was rejected under 35 U.S.C. §102(b) as allegedly being anticipated by JP 51042174 to Aoyama et al. Although Applicants disagree with the Examiner's allegations, the amendments to the claims render the rejection moot.

Further, Aoyama fails to teach and enable each and every element of newly added claims 18-22. Aoyama relates to thiuram disulfides used as bactericides and fungicides. The instant invention, by contrast, is directed to 1-, 2- or 3-dimensional assembly of nanostructured units, comprising a multifunctional linker molecule of the formula  $CON_1-FUNC_1-X-FUNC_2-CON_2$ .

The multifunctional linker molecule includes, for example, 1,4-dimercaptoacetamidobenzene of a specific formula, dimercaptoacetamidocyclohexane, 1,4-dimercaptoacetamido-9,10-anthraquinone, 1,5-dimercaptoacetamido-9,10-anthraquinone, 1,8-dimercaptoacetamidooctane, 1,4-dithiocarbamatobenzene or 1,4-dithiocarbamatocyclohexane. Further, the conductivity of the assembly is determined by the structure of the multifunctional linker molecule. Aoyama does not teach or enable such an invention.

Aoyama is also deficient in disclosing nanostructured units such as nanoparticles, metals, semiconductors, core/shell semiconductor nanoparticles, nanowires, nanotubes, nanobelts and electrodes; a multifunctional linker molecule attached between two metal or semiconductor electrodes; or an assembly in the form of interconnected nanostructured units. There is also no disclosure of utilizing the instantly claimed 1-, 2- or 3-dimensional assemblies in the manufacture of self-assembled electronic circuit elements, electrodes and metal coatings.

Consequently, reconsideration and withdrawal of the Section 102 rejection are respectfully requested.

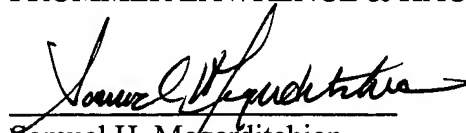
### CONCLUSION

By this Amendment, claims 18-22 should be allowed; and this application is in condition for allowance. Favorable reconsideration of the application, withdrawal of the rejections, and prompt issuance of the Notice of Allowance are, therefore, all earnestly solicited.

Respectfully submitted,

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